

What is Claimed is:

1. An apparatus for restoring aortic valve which is used for the correction of aortic  
valvular regurgitation caused by increase in the diameter of aortic annulus and/or  
5 sinotubular junction, wherein the apparatus for restoring aortic valve consists of the aortic  
annulus repairing apparatus in band or ring type that stabilizes uniformly the diameter of  
aortic annulus and the sinotubular junction repairing apparatus in ring type that stabilizes  
uniformly the diameter of sinotubular junction.

10 2. The apparatus for restoring aortic valve as set forth in claim 1, wherein the  
aortic annulus repairing apparatus consists of the inner stabilizer (12) that stabilizes the  
diameter of aortic annulus from the inside of the aortic lumen and the outer felt stabilizer  
(14) that supports the diameter from the outside of the aortic lumen.

15 3. The apparatus for restoring aortic valve as set forth in claim 2, wherein the inner  
stabilizer (12) and outer felt stabilizer (14) are a band type or a ring type.

20 4. The apparatus for restoring aortic valve as set forth in claim 2, wherein the  
sewing passage of the inner stabilizer (12) is formed thinner than the surrounding area in  
order to stick the stabilizer tightly well on the wall of the aortic lumen.

25 5. The apparatus for restoring aortic valve as set forth in claim 2 or 3, wherein the  
inner stabilizer (12) and the outer felt stabilizer (14) of the ring type have three equally  
spaced markers (10) in the circumference, which enables to determine the direction of the  
stabilizer.

6. The apparatus for restoring aortic valve as set forth in claim 2 or 3, wherein  
the band type of inner stabilizer (12) and outer felt stabilizer (14) has a vertical mark on

both ends in order to fix only the fibrous part of aortic annulus and has about 2mm extra margin outside of the vertical line which enables the stabilization more easily.

7. The apparatus for restoring aortic valve as set forth in claims 2 to 4, wherein the inner stabilizer (12) and outer felt stabilizer (14) are made of any synthetic fiber or biological material harmless to human.

8. The apparatus for restoring aortic valve as set forth in claim 1, wherein the sinotubular junction repairing apparatus is composed of the inner stabilizer in ring type(22) that stabilizes the diameter of sinotubular junction and the outer felt stabilizer (24) in ring type that supports the above diameter from outside of sinotubular junction.

9. The apparatus for restoring aortic valve as set forth in claim 8 wherein the inner stabilizer (22) and outer felt stabilizer (24) are formed in a ring type.

10. The apparatus for restoring aortic valve as set forth in claim 8, wherein the suture passage of the above inner stabilizer (22) is formed thinner than the surrounding part in order to stick the stabilizer tightly well on the surrounding wall in the sinotubular junction.

11. The apparatus for restoring aortic valve as set forth in claim 8 or 9, wherein the inner stabilizer (22) and the outer felt stabilizer (24) of the ring type have three equally spaced markers (10) in the circumference, which enables to determine the direction.

12. The apparatus for restoring aortic valve as set forth in claims 8 to 10, wherein the inner stabilizer (22) and outer felt stabilizer (24) are made of any synthetic fiber or biological material harmless to human.

13. A treatment method for the aortic valvular regurgitation using the aortic valve restoring apparatus as set forth in claims 1 to 8,

wherein aortic annulus inner stabilizer(12) in band type or ring type is implanted to inside of the aortic lumen, and the annulus outer felt stabilizer(14) is located to the outside of the aortic lumen to support the above annulus inner stabilizer, and thus normalizing the diameter of aortic annulus which is an effective treatment for the aortic valvular regurgitation.

14. A treatment method for the aortic valvular regurgitation using the aortic valve repairing apparatus as set forth in claims 1 or 8 to 12, wherein STJ inner stabilizer in the ring type is implanted to the inside of the sinotubular junction, and the STJ outer felt stabilizer is located to the outside of the sinotubular junction to support the above STJ inner stabilizer, and thus normalizing the diameter of sinotubular junction.